## STATEMENT OF THE CLAIMS

1. (currently amended) A process for stimulating collagen containing structures, the process comprising illuminating a target tissue structure with illuminating radiation causing elevation of ~~the~~ temperature of the target tissue structure, the radiation dosed to the target tissue structure being of a controlled low level ~~controlled~~ to induce an inflammatory response in the target tissue structure, wherein energy density of the illuminating radiation delivered to the target tissue structure is substantially in a range from 2 to 20 $Jcm^{-2}$.

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2. (original) A process according to claim 1, wherein the target tissue structure is illuminated directly, without the illuminating radiation passing significantly through extraneous tissue.

3. (original) A process according to claim 2, wherein tissue extraneous to the target tissue structure is bypassed.

4. (currently amended) A process according to claim 1 wherein the illuminating radiation exits illuminating radiation apparatus externally of a ~~the~~ body of which the target tissue structure forms a part.

5. (currently amended) A process according to claim 1, wherein the illuminating radiation exits radiation apparatus internally of illuminating a ~~the~~ body or organism of which the target tissue structure forms a part.

6. (original) A process according to claim 5, wherein the illuminating radiation exits illuminating radiation apparatus internally of the target tissue structure.

7. (currently amended) A process according to claim 1, wherein the absorption of the radiation by the target structure at the controlled ~~predetermined~~ low level ~~controlled dose~~ stimulates collagen regrowth.

8. (previously presented) A process according to claim 1, wherein the illuminating radiation dose is controlled to ensure that overdosing of the target tissue structure does not take place.

9. (currently amended) A process according to claim 1, wherein ~~the~~ wavelength of the illuminating radiation is selected such that there is at least some absorption by the target structure or tissue.

B3 cont.

10. (currently amended) A process according to claim 1, wherein the illuminating radiation ~~delivered~~ is light, substantially in a ~~the~~ wavelength bandwidth 400 -1500nm.

11. (currently amended) A process according to claim 1, wherein the radiation delivered is light, substantially in a ~~the~~ wavelength bandwidth 500-1000nm.

12. (previously presented) A process according to claim 1, wherein the illuminating radiation is of a discrete wavelength or relatively narrow wavelength bandwidth.

13. (previously presented) A process according to claim 1, wherein the illuminating radiation is of a relatively broad band light source filtered to a discrete or relatively narrow wavelength bandwidth.

14. (previously presented) A process according to claim 1, wherein the illuminating radiation is laser radiation.

15. (previously presented) A process according to claim 1, wherein the illuminating radiation is obtained from an LED.

16. (previously presented) A process according to claim 1, wherein the illuminating radiation is obtained from a broad band white light source.

17. (currently amended) A process according to claim 1, wherein a body tissue structure is illuminated by means of direct external illumination of the body tissue structure.

18. (currently amended) A process according to claim 1, wherein the illuminating radiation is directed into a ~~the~~ body to be delivered to a ~~the~~ site of an internal target tissue structure.

19. (canceled)

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20. (currently amended) A process according to claim 1 for inducing a controlled inflammatory response in at least one ~~or more of the following~~ collagen containing structure selected from a group consisting of ~~structures~~:

bone
dentin
cartilage
uterus
large veins and arteries.

21. (currently amended) Apparatus for use in stimulating collagen containing structures, which apparatus include:

i) a source of illuminating radiation; and,

ii) means for directing the illuminating radiation to a target site,

wherein energy density of the illuminating radiation is substantially in a range from 2 to 20 $Jcm^{-2}$.

22. (currently amended) Apparatus according to claim 21, wherein the means for directing the illuminating radiation to the target site includes:

(a) focusing ~~focussing~~ means; and ~~and/or,~~

~~(b) an optical delivery line; and,~~

(b) ~~(c)~~ an emitter portion ~~(comprising the optical delivery line or associated therewith)~~ through which the radiation is emitted in order to illuminate the target site ~~structure~~.

23. (currently amended) Apparatus according to claim 21 wherein the means for directing the illuminating radiation to the target site is configured to permit manual manipulation enabling a ~~the~~ zone of radiation impingement with the target site to be manually altered.

24. (previously presented) Apparatus according to claim 21, wherein the apparatus is provided with an automated drive arrangement.

B3 Cont.

25. (currently amended) Apparatus according to claim 21, including pulsation means for pulsing the illuminating radiation, preferably having a pulse duration substantially in a ~~the~~ range from 1 microsecond to [[-]] 100ms.

26. (currently amended) Apparatus according to claim 21, including scanning means for scanning the illuminating radiation over a ~~the~~ target tissue structure.

27. (currently amended) An apparatus for delivering ~~A beam of~~ illuminating radiation to a target tissue structure, the apparatus comprising ~~having~~:

an illumination source that produces a illuminating radiation having

i) a wavelength substantially within a ~~the~~ range from 400nm to 1100nm and being of a discrete or relatively narrow bandwidth, and[[;]]

ii) an energy density within a range from ~~the beam of~~ 2 to 20 $Jcm^{-2}$; and

means for directing said illuminating radiation produced by said illumination source to the ~~for use in directly illuminating a~~ target tissue structure whereby ~~wherein~~ tissue extraneous to the target tissue structure is bypassed~~, the beam producing~~ and an illuminating spot size ~~is produced~~ substantially in the range from 1 to 10mm in diameter is produced at the target tissue structure.